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### **Fertility Intentions and Obstacles to their Realization in France and Italy**

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Arnaud RÉGNIER-LOILIER\* and Daniele VIGNOLI\*\*

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## Fertility Intentions and Obstacles to their Realization in France and Italy

*To understand fertility behaviours in countries where effective methods of birth control are widely available, they must be analysed in terms of intentions and realization. In particular, what are the factors – economic, social or cultural – that lead couples to have more or fewer children than initially planned? Using comparable longitudinal data from the Generations and Gender Surveys (GGS), Arnaud RÉGNIER-LOILIER and Daniele VIGNOLI compare fertility intentions and realization in France and in Italy, two countries where couples start out with similar wishes (at least two children in the majority of cases), but where the final outcomes are very different. They show that after controlling for age and number of children, socioeconomic factors play a key role in the decision to postpone or forego childbearing plans, although they operate in different ways in the two countries.*

In modern societies, effective contraception is now widely available, enabling couples to decide how many children they wish to have, and when to have them. Fertility choices and preferences are thus a key factor in the study of family behaviours (Ongaro, 1982; Palomba, 1991; De Sandre et al., 1997; Borra et al., 1999; Sorvillo and Marsili, 1999; Goldstein et al., 2004; Testa and Grilli, 2006; Mills et al., 2008; Régnier-Loilier and Solaz, 2010). Transposed to the field of fertility, Ajzen's "theory of planned behaviours" (1991) posits that intentions are antecedents of behaviour. Intentions themselves depend on the individual's situation (conjugal or financial, etc.: Mazuy, 2009; Régnier-Loilier and Vignoli, 2009), and on the more general context (political climate, for example), both of which evolve over the person's childbearing years (Monnier, 1987; Régnier-Loilier, 2006).

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A classic distinction is made between “positive” intentions (the desire to have a/another child in the future), and “negative” intentions (the wish to remain childless or have no further children). Few studies to date have focused on the link between intentions and realization, mainly due to the lack of suitable data, although several longitudinal surveys have been conducted in recent years. Converging results have been obtained, showing that negative intentions are a very good indicator of future behaviours, while positive intentions, although still a good predictor, systematically overestimate observed fertility (Westoff and Ryder, 1977; Monnier, 1987; Schoen et al., 1999; Symeonidou, 2000; Noack and Østby, 2002; Toulemon and Testa, 2005; Meggiolaro, 2009; Rinesi, 2009). Bongaarts (2001) pinpoints certain factors that may cause couples to revise their fertility plans upward, such as a previous unplanned birth, the death of a child, or the desire to have a child of a particular sex. Conversely, reasons such as delayed entry into childbearing, fecundity problems or activities that compete with fertility plans, may have the opposite effect. According to Bongaarts, these last three factors are most frequent in developed countries, explaining why expected family size is generally overestimated in these regions of the world.

Despite a relative convergence of fertility models in Europe, large contrasts between countries still persist. Some countries, such as Germany, Spain, Portugal and Italy, have very low fertility rates (between 1.3 and 1.5 children per woman), while others, such as Denmark, Finland, Norway, Sweden, Ireland and France, still have near-replacement levels of between 1.9 and 2.0 children per woman (Pison, 2011). While the political context specific to each country explains a part of the differences observed (Thévenon and Gauthier, 2010), little is known about the way in which fertility decisions are taken at individual level and, in particular, whether couples’ characteristics affect the realization of fertility intentions in the same way in different contexts.

A comparison between France and Italy is worthwhile for two reasons. The first is theoretical. The two countries are close neighbours, with relatively similar profiles in terms of fertility intentions (Régnier-Loilier and Vignoli, 2009), but with contrasting fertility models (2 children per woman in France, versus 1.4 in Italy) and different institutional contexts, characterized by more generous social and family welfare policies and more extensive childcare provision in France than in Italy. This comparison will also shed light on the situations which, at couple level, hinder the realization of positive fertility intentions in a given context. The second reason is pragmatic. To compare fertility intentions and their subsequent realization, comparable sets of longitudinal data are needed for the countries concerned. The Generations and Gender Surveys (GGS) provide such information for the first time (Appendix), but for a few countries only. While 17 countries took part in the first wave of the GGS, the second wave is not yet completed in some countries, and the data are not yet available in others.

We begin with a description of French and Italian fertility, in terms of timing, number of children and short-term intentions. We then examine whether positive intentions are realized to the same extent in both countries and whether the same obstacles to realization are encountered. Last, using an approach rarely applied up to now, the GGS survey data are analysed to examine the extent to which an intention not realized in the short term may be deferred or even abandoned.

## **I. Family formation in France and Italy: theoretical and empirical framework**

### *Contrasting contexts*

In France, the institution of marriage has been profoundly transformed in the last forty years. The number of marriages has fallen, while that of consensual unions has increased, and unions have become more unstable, leading to a radical change in the family landscape, and notably a large increase in lone-parent families. However, these changes are not associated with a rejection of the family as such, and the majority of couples express the desire to have children. In fact, more than half of all births in France today occur outside marriage (Pla and Beaumel, 2010). In most European countries – including France and Italy – another key feature of the changing dynamics of family formation is the postponement of first births. For France, this has been explained by the longer time spent in education (Robert-Bobée and Mazuy, 2005) and increasingly delayed labour market entry, the desire to be in a stable relationship (Mazuy, 2009), but also the wish to make the most of life as a childless couple (Régnier-Loilier and Solaz, 2010). These changes are inseparably linked to the diffusion of modern contraception (notably the pill, the most widely used method in France) from the 1970s, and the massive entry of women into the labour force.

In Italy, by contrast, the majority of children are born to married couples (20% of non-marital births in 2008 according to ISTAT). However, despite the persistence of this Italian singularity (Dalla Zuanna and Micheli, 2004), the country has recently entered a new demographic phase marked by an increase in divorces, consensual unions and non-religious marriages (Rosina, 2007; Vignoli and Ferro, 2009). In this context, the obstacles to parenthood are probably greater in Italy than in France due to the absence of institutional support for the family and for mothers. Career opportunities for women are seriously compromised by family obligations, especially when the spouse makes little or no contribution to domestic chores or childcare. This situation leads many women to delay their first child, to limit the number of children they wish to have, or even to forego childbearing altogether (Mencarini, 2007). High youth unemployment in recent years and growing job insecurity, for women especially, are additional factors at play (Salvini and Ferro, 2007).

Among the reasons for delayed childbearing in Italy, and in addition to those shared by France and other modern societies, such as longer schooling and greater difficulty in entering a labour market whose contours are increasingly ill-defined (Vignoli, 2011), other factors specific to Italy include strong family relationships and a particularly unfavourable housing market (Dalla Zuanna et Billari, 2008). Indeed, families are very closely knit in Italy at all stages of the life cycle; young people live for longer with their parents, and often continue to live nearby after leaving home. Moreover, the difficulties of buying a home and the prohibitive cost of the rare properties available on the rental market are a further disincentive to family formation for young Italians.

These differences in the backdrop to the fertility choices made by couples in France and Italy are also associated with fertility models that have diverged in certain respects over recent decades.

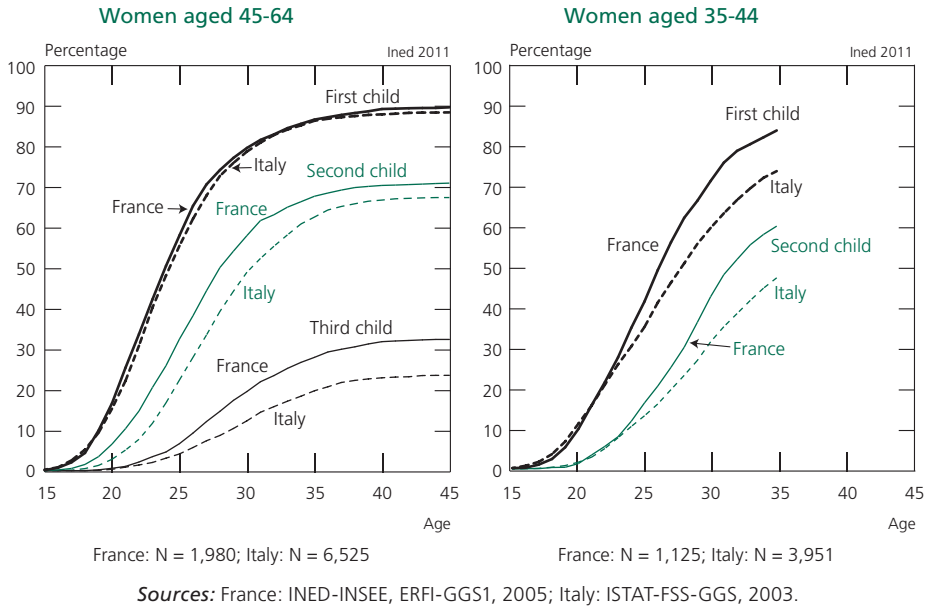
### *Growing disparities in the intensity and timing of fertility*

The mean number of children per woman aged 45-64 (at the time of the first survey wave) is quite similar in both countries, although slightly lower in Italy, with 1.9 children per women versus 2.0 in France. In terms of distribution, two-child families are most frequent (39% in France and 44% in Italy), but the proportion of families with three or more children is much higher in France (32% versus 24%).

The Italian fertility decline that began in the late 1970s is reflected in the fertility timing of younger cohorts (Figure 1). For women aged 45-64, the first birth follows the same pattern in both countries: at age 25, 58% of women in France and 55% in Italy already had a first child, and at the end of their reproductive life (at age 45), 90% and 88%, respectively, were mothers. For these cohorts of women, there is nonetheless a slight delay in the arrival of the second child in Italy. At age 30, 49% of women had had a second child, versus 58% in France, resulting in a lower final proportion of women with two or more children in Italy than in France (67% versus 71%). This difference is even more pronounced for the third child.

While we cannot observe the lifetime fertility of the younger cohorts (aged 35-44) because they have not all completed their reproductive lives, a postponement of first and second births is visible in both countries, but more marked in Italy: at age 25, 42% of women in France and 35% in Italy have had a first child (a 7-point difference between countries compared with a 3-point difference in the 45-64 age group), and at age 30, the proportions with a second child are 43% and 32%, respectively (an 11-point difference versus a 9-point difference for the 45-64 age group). These differences are not simply the consequence of longer birth postponement in Italy than in France, since the gap remains at age 35, by which time 84% of women in France have had a first child and 61% a second, versus 74% and 47%, respectively, in Italy. Last, for the youngest cohorts (aged 25-34, results not presented here), first-birth postponement is even more pronounced in Italy.

Figure 1. Aggregate proportions of women with a first (second, third) child at a given age, France and Italy



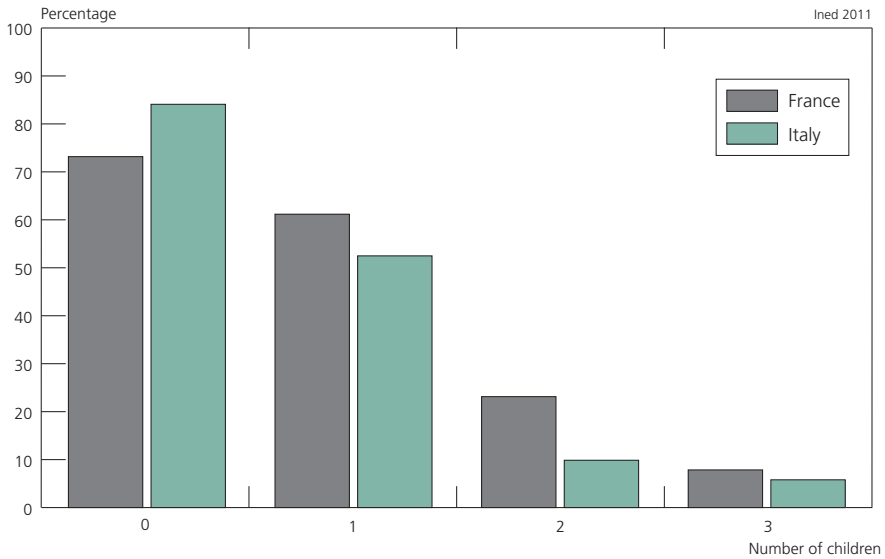
### Different fertility intentions

The differences in fertility behaviour between France and Italy are mirrored, to a certain extent, in fertility intentions (Figure 2). Among childless women aged 20-40, the proportion intending to have a child in the next three years<sup>(1)</sup> is lower in France (74%) than in Italy (85%). This is due to a selection effect, however, since the proportion of women who are already mothers in this age group is higher in France (71% versus 49% in Italy). Conversely, a higher proportion of mothers in France intend to have another child in the next three years. In France, 62% of mothers of one child intend to have a second, versus 53% in Italy. A similar gap is observed for the intention to have a third child (23% versus 10%, respectively).

Generally speaking, the number of children (including those already born) desired by women aged 20-40 is slightly higher in France than in Italy, (2.4 children per woman on average versus 2.1, respectively) (Régnier-Loilier and Vignoli, 2009). In France, 43% desire two children and 41% desire three or more, while in Italy the majority express a desire for two children (60%). Despite this difference, the family of two children or more is still a strong symbolic reference in both countries, and only a small minority of women state a preference for just one child (15% in Italy and 11% in France). This applies equally in Italy, even though current trends show that a growing number

(1) Sum of “definitely yes” and “probably yes” responses.

**Figure 2. Percentages of women intending to have a child in the next three years by number of children already born, France and Italy**



*Population:* Women in a union aged 20-40 (Italy: N = 3,766; France: N = 1,229).  
*Sources:* France: INED-INSEE, ERFI-GGS1, 2005; Italy: ISTAT-FSS-GGS, 2003.

of women are ending their reproductive life with just one child (Breton and Prioux, 2009). While most women intend to have one or more children, the current fertility differentials observed between France and Italy suggest that desires are not always fulfilled, especially in Italy. To explore these behavioural differences in greater depth, it is important to verify, ex-post, whether reported intentions have been realized or not, and to characterize the couples who never have the child that they initially desired.

## II. Were intentions realized three years later?

The longitudinal GGS data can be used to compare fertility intentions and realization. The first two waves, conducted at three-year intervals in both countries (Appendix), enable us to match the responses to the question “Do you intend to have a/another child during the next three years?” against the behaviours observed in the three subsequent years.

### *Brief literature review*

A recent contribution to the debate on the correspondence between fertility intentions and realization has been developed by Rinesi (2009). Using a database that matches the results of a survey of mothers of at least one child (who reported their intentions) against population registers (to see whether intended births

occurred), she shows that the expressed intentions, among other demographic and socioeconomic characteristics, represent the factor with the strongest influence on behaviours for the transition to both second and third child.

Among the demographic variables, age and number of children already born play a key role (Noack and Østby, 2002; Quesnel-Vallée and Morgan, 2003; Berrington, 2004; Testa and Toulemon, 2006). Birth postponement does not simply reduce the desired number of children, but also the likelihood of having the desired family size. Moreover, the greater the difference between the number of children already born and the intended family size, the lower the probability of a transition to the next parity (Symeonidou, 2000).

Certain studies suggest that the type of union plays a central role. They include two conducted in the United States, (Schoen et al., 1999; Quesnel-Vallée and Morgan, 2003) which found that, at a given parity, married couples are more likely to realize their positive intentions than unmarried ones. In France, on the other hand, the type of union does not appear to significantly influence realization, all other things being equal<sup>(2)</sup> (Toulemon and Testa, 2005). The role of gender arrangements within the couple is also variable across countries. In Greece, for example, women with a less traditional view of gender relations are less likely to achieve their intended number of births (Symeonidou, 2000), but this correlation has not been found in the United States (Thomson, 1997).

Concerning the effect of socioeconomic characteristics, the most highly educated women appear to realize their positive fertility intentions more frequently, both in France and in Italy (Toulemon and Testa, 2005; Rinesi, 2009). However, Quesnel-Vallée and Morgan (2003) show that beyond the realization of short-term intentions, the most educated women tend to have fewer children than initially desired in the United States.

Last, among economic factors, the roles of housing conditions and of financial security (including employment status) are often cited (Thomson, 1997; Symeonidou, 2000; Berrington, 2004). Rinesi (2009) shows, for example, that in the Italian context, couples with a more stable situation are more likely to have the number of children they desire. Economic uncertainty also plays a role in France, where unemployment adversely affects the realization of initial fertility intentions (Testa and Toulemon, 2006).

### *Fewer positive fertility intentions are realized in Italy*

Among cohabiting couples where the woman was of childbearing age in the first wave, 19% in France had a child in the three following years, compared with 15% in Italy.<sup>(3)</sup> These results are consistent with those obtained in both

(2) Note that they take account of union duration.

(3) The percentage for Italy is slightly overestimated because the second survey wave took place slightly more than three years after the first (Appendix). The couples where the woman was pregnant at the time of the second survey wave were considered to have had a child, in that they had already realized their fertility intention.



countries using different data sources (France: Toulemon and Testa, 2005; Italy: Rinesi, 2009).

This overall proportion conceals large differences by type of intention recorded three years previously and its degree of certainty.<sup>(4)</sup> Generally speaking, and whatever the country considered, negative fertility intentions (not wanting a/another child) are highly predictive of future behaviour (Figure 3). Very few of the persons who reported definitely not wanting a/another child had one between the two waves (only 6% in France and 2% in Italy). Conversely, positive intentions tended to be over-optimistic: among persons who definitely intended to have a child in the next three years, only two-thirds did so, both in France and in Italy.<sup>(5)</sup>

Alongside these similarities between the two countries, a feature specific to France also emerges: the proportion of couples who have a child is systematically higher, whatever the strength of the initial intention. In particular, among the 5% of undecided persons in France who replied “probably not” to the question, 32% went on to have a child, versus just 9% of the 22% who answered “probably not” in Italy. There seems to be a more flexible attitude in France towards the future among those who give uncertain negative answers, and this may be linked to differences in family policies between the two countries. These policies have been in place for many years in France and may, at individual level, lessen the effect of certain obstacles to childbearing. This is in contrast to Italy, where family policy provides little support to parents, notably for reconciling work and family life (Matysiak and Vignoli, 2010).

The aim being to identify potential obstacles to the realization of positive fertility intentions, the rest of the study focuses on positive intentions (persons who answered “yes” or “probably yes” to the question on intentions), by comparing those who went on to have a child with those who did not.

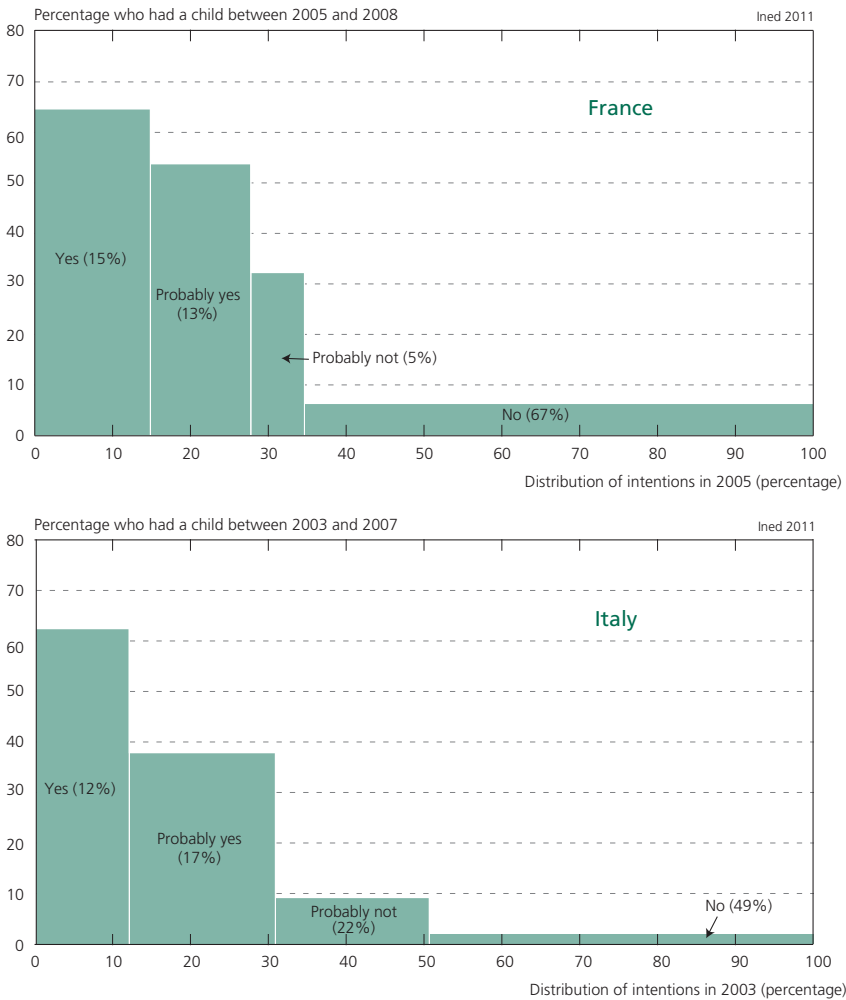
### *Characteristics of couples who did not have the desired child*

The literature review presented above shows that a whole set of characteristics affect the realization of intentions. They include: age, conjugal status, number of children already born, but also partners’ employment status (notably employment security), dwelling occupancy status (owner or tenant), partners’ level of education, distance from the respondent’s mother’s home (who may provide help with childcare), religious practice (which influences fertility

(4) Based on four response categories: definitely yes; probably yes; probably not; definitely not. Excluding the word “definitely” in the French questionnaire does not appear to have produced an under-estimation of more firm intentions, which are proportionally more numerous than in Italy, for both positive and negative intentions.

(5) The graded effect of the intention variable, notably the better predictive power of negative intentions, is hardly surprising, as it is explained by a selection effect: among couples who do not want a/another child, there are more couples among whom the woman is older, and therefore less likely to become pregnant.

**Figure 3. Proportion of couples who had at least one child between the two survey waves, by reported intentions three years earlier, France and Italy**



**Population:** Persons in a cohabiting union and of childbearing age in the first wave (where the women is below 50 and where both partners think that they can still have children) (France: N = 2,225 ; Italy: N = 3,390).

**Sources:** France: INED-INSEE, ERFI-GGS1-2, 2005-2008; Italy: ISTAT-FSS-GGS1-2, 2003-2007.

intentions). In order to tease out the net effect of these different factors, notably taking account of the degree of intentionality, and to identify the characteristics with the strongest negative effect on the realization of childbearing plans, we modelled the probability of having a child in the next three years among couples who intended to do so, in Italy and in France. Table 1 present the  $\beta$  coefficients

Table 1. Probability ( $\beta$  coefficient and %) of having versus not having a child between the two survey waves, among persons intending to have one at the first survey wave, France and Italy

		France				Italy			
		$\beta$ coef.	Prob.	Sig. level	Number	$\beta$ coef.	Prob.	Sig. level	Number
Constant		0.91	71.2	n.s.	–	0.24	55.9	n.s.	–
Woman's age	Below 25	0.00	72.2	Ref.	87	0.00	55.9	Ref.	27
	25-29	0.94	86.4	***	214	0.14	59.2	n.s.	281
	30-34	0.61	82.0	*	190	–0.24	49.9	n.s.	445
	35+	–1.16	43.7	***	140	–1.59	20.5	***	465
Number of children	0	0.00	71.2	Ref.	255	0.00	55.9	Ref.	444
	1	–0.11	69.0	n.s.	204	0.37	64.7	**	583
	2 or more	–0.86	51.2	***	172	–0.14	52.3	n.s.	191
Type of couple	Unmarried	–0.65	56.4	***	297	0.30	63.1	n.s.	110
	Married	0.00	71.2	Ref.	334	0.00	55.9	Ref.	1108
Separation	No	0.00	71.2	Ref.	589	0.00	55.9	Ref.	1157
	Yes	–2.00	25.0	***	42	–1.51	21.9	***	61
Woman's educational level	Low	0.00	71.2	Ref.	158	0.00	55.9	Ref.	322
	Medium	0.43	79.2	*	257	0.30	63.1	***	669
	High	0.25	76.0	n.s.	216	0.73	72.4	***	227
Partner's educational level	Low	0.00	71.2	Ref.	240	0.00	55.9	Ref.	462
	Medium	0.00	71.2	n.s.	210	0.22	61.2	n.s.	563
	High	0.17	74.6	n.s.	181	0.45	66.4	**	193
Woman's occupational status	Public sector employment	0.00	71.2	Ref.	177	0.00	55.9	Ref.	207
	Private sector employment, permanent contract	–0.43	61.7	*	271	0.49	67.5	**	535
	Private sector employment, temporary contract	–0.77	53.5	**	63	0.34	64.0	n.s.	66
	Unemployed	–0.20	66.9	n.s.	46	–0.03	55.1	n.s.	56
	Inactive (homemaker, etc.)	0.17	74.6	n.s.	74	0.73	72.3	***	354

**Table 1 (cont'd). Probability ( $\beta$  coefficient and %) of having versus not having a child between the two survey waves, among persons intending to have one at the first survey wave, France and Italy**

	France				Italy			
	$\beta$ coef.	Prob.	Sig. level	Number	$\beta$ coef.	Prob.	Sig. level	Number
Partner's occupational status								
In employment	0.00	71.2	Ref.	572	0.00	55.9	Ref.	1178
Doesn't work	-0.17	67.6	n.s.	59	0.19	60.4	n.s.	40
Dwelling occupancy status								
Tenant	0.63	82.2	***	323	0.15	59.5	n.s.	205
Owner	0.00	71.2	Ref.	285	0.00	55.9	Ref.	847
Other (housed free of charge, etc.)	0.02	71.6	n.s.	23	-0.24	49.9	n.s.	166
Distance from respondent's mother's home								
Near	0.44	79.4	*	222	0.12	58.9	n.s.	455
Moderate	0.27	76.4	n.s.	214	0.46	66.7	**	420
Far	0.00	71.2	Ref.	144	0.00	55.9	Ref.	237
Mother deceased	0.50	80.4	n.s.	51	0.24	61.6	n.s.	106
Religious practice								
At least once a month	0.50	80.3	n.s.	48	0.06	57.2	n.s.	630
Less often	0.00	71.2	Ref.	583	0.00	55.9	Ref.	583
Firmness of intention								
Certainly	0.00	71.2	Ref.	342	0.00	55.9	Ref.	482
Probably	-0.83	52.0	***	289	-1.19	27.9	***	736
Distribution								
No children yet		41.0%		259		47.0%		572
Has had a child		59.0%		372		53.0%		646
Type of model								
Pseudo R <sup>2</sup> (firmness of intention only)		0.0417				0.0524		
Pseudo R <sup>2</sup> (complete model)		0.3334				0.1639		
<p><b>Interpretation:</b> A positive (resp. negative) and statistically significant coefficient indicates a factor which increases (resp. decreases) the probability of having a child, all other things being equal. The stronger the coefficient (either positive or negative), the greater the factor's influence on this probability.</p> <p><b>Significance levels:</b> * 10%; ** 5%; *** 1%; n.s. non-significant.</p> <p><b>Population:</b> Persons having expressed the intention to have a child "in the next three years" in a cohabiting union and of childbearing age in the first wave (where the women is below 50 and where both partners think that they can still have children).</p> <p><b>Sources :</b> France : INED-INSEE, ERFI-GGS1-2, 2005-2008; Italy: ISTAT-FSS-GGS1-2, 2003-2007.</p>								

obtained from the logistic regression, the estimated probabilities (expressed as percentages)<sup>(6)</sup> and the significance level of each factor.

The selected characteristics all refer to the situation observed at the first survey wave, except the indicator of union dissolution which describes changes that occurred between two waves. The other characteristics may also have changed over the same period (employment status, for example), but we do not always have information on the dates of these events. It would have been useful to include other characteristics, such as the partner's intention,<sup>(7)</sup> the share of household tasks assumed by each partner, union duration<sup>(8)</sup> or fecundity problems. However, these data are not presented simultaneously in the two surveys, or are not sufficiently comparable. In addition, in view of the small sample size, it was not possible to create interactions between certain variables. For example, it would have been interesting to match the number of children already born with the woman's labour market status, as these two variables are linked (Neyer et al., 2011).

The reference situation corresponds to a married childless couple, who did not separate between the two waves, where the woman is aged below 25 at the time of the first wave and works in the public sector, where the man is active, where both partners have a low educational level,<sup>(9)</sup> are homeowners (or homebuyers) and live far from the home of the respondent's mother,<sup>(10)</sup> never or rarely attend religious services and have stated a firm intention to have a child in the next three years ("definitely yes"). This "reference couple" more often realized its positive fertility intention in France (71%) than in Italy (56%).

Comparing the results for both countries reveals a number of similarities, notably the decisive role of intentions (Ajzen, 1991) and their firmness in subsequent behaviours (Toulemon and Testa, 2005). The probability of having had a child is twice as high for persons who replied "definitely yes" to the question on intentions as for those who replied "probably yes". All other things being equal, age also has a marked effect in both France and Italy, though with some nuances. The probability of having had a child is higher for couples where the woman was aged 25-34 at the time of the first wave (relative to couples where the woman was below 25), but only in France, although it is higher in both countries after age 35. In France, the intentions expressed are probably

(6) Calculation method:  $\{1 / [1 + \exp(-\beta(\text{constant}) - \beta(\text{factor}))]\} \times 100$ .

(7) The partner's intention influences fertility realization (Thomson, 1997). More specifically, intentions are more frequently realized if both partners have the same intentions (ISTAT, 2010).

(8) This is not included in the model because too highly correlated to the woman's age.

(9) As the educational systems are not directly comparable, we defined three categories: low, medium and high. Low corresponds to all qualifications below high-school graduation, medium corresponds to persons who completed high school and who have up to 2 years of higher education, and high corresponds to qualification requiring three or more years of higher education.

(10) This is the distance separating the respondent's and his/her mother's home. The respondent may be a man or a woman (in the GGS, the distance between the respondent's home and that of the parents-in-law is not indicated).

less realistic at young ages, given that many couples define a set of preconditions to be satisfied before starting a family: a stable job, confidence in the stability of the union, a chance to enjoy life as a childless couple before starting a family (Régnier-Loilier, 2007), but also a sense of readiness felt by both partners in the couple. In France and Italy alike, most couples have their children in the period between ages 25 and 34, by which time most of these preconditions have been met. After age 35, age can become an obstacle to the realization of intentions, since fecundity declines progressively over a woman's reproductive life (Leridon, 2010).

Among other points shared by both countries, the geographical proximity of parents, notably the mother, who is the main carer of potential grandchildren, favours the realization of positive intentions. This intergenerational support probably eases the constraints upon working mothers, especially in Italy where formal childcare provision is very limited. The effect is modest, however, but probably weakened due to the imprecision of the indicator used (see above). Conversely, and not surprisingly, a couple's separation between the two waves adversely affects the realization of intentions. Last, religious practice, which strongly influences the desired number of children – the most religious respondents want more children (Régnier-Loilier and Vignoli, 2009) –, has no significant effect on the realization of short-term intentions.

Unlike the study of characteristics affecting the desired number of children, which revealed a majority of similarities between France and Italy (Régnier-Loilier and Vignoli, 2009), here we observe a larger number of differences. The number of children plays a role, but differently in each country. In France, the probability of having realized their intentions is 71% for childless couples, but just 51% for parents of at least two children. While for most couples, a second child is a foregone conclusion for both partners, there is less consensus regarding the decision to have a third child. Moreover, a third child implies a greater upheaval in the couple's life (Régnier-Loilier, 2007), and this may explain their decision to forego an initially desired third birth. In Italy, on the other hand, it is the positive intentions of couples who already have a child which are most often realized between two waves. This may be due to a selection effect, however. In a sociopolitical context generally unfavourable to families, we may suppose that couples with a first child have more "realistic" fertility intentions than those who are not yet parents.

Marital status also matters, but only in France, where marriage is not as universal as in Italy. Married couples realize their intentions more frequently than unmarried ones. As marriage is in decline, it tends to concern increasingly selected couples with strong family values. While marriage is associated with a more traditional attitude to the family and with specific family behaviours, it also more frequently concerns couples who have been together for longer,<sup>(11)</sup>

(11) In France, for example, married couples have been cohabiting for 7 years on average, versus 4 years for unmarried couples (among the population considered here).

for whom we can assume that the intention to have a child is more well thought out. However, the probability that they will have had a child is lower, all other things being equal (model not presented here).<sup>(12)</sup> It is interesting to note that when this variable is introduced, the effect of marital status persists, contradicting the results obtained for France in a previous study by Toulemon and Testa (2005), who did not find any difference by marital status. This may be because the interval chosen between intention and realization covered a longer period (5 years versus 3 years here), or again because married couples today are increasingly selected.<sup>(13)</sup>

The partners' educational level only affects behaviour in Italy, where the highest educated more frequently realize their intentions. This finding is confirmed by a recent study on this same country (Rosina and Testa, 2009). This could be explained by an income effect, since education is a good proxy for the chances of successful labour market integration, and hence for the couple's income (Kreyenfeld, 2002). We can therefore posit that these couples are in a stronger position to surmount certain difficulties – childcare for example, a very important factor in Italy where there is little government support for families – both in financial terms and in terms of the means available to reconcile work and family life. In this context, more realistic fertility intentions or a greater capacity to plan for the future among the most highly educated are also plausible hypotheses.

In France, on the other hand, educational level has no effect.<sup>(14)</sup> It is employment stability that appears to count most. The likelihood of having realized a fertility project increases with female employment stability, following an upward path by level of job security (OECD, 2009). While for a couple where the woman has a temporary contract the estimated probability of having had a child is just 53%, it rises to 62% if she has a permanent contract and 71% if she works in the public sector. Employment stability effects a couple's financial situation, but also their scope for reconciling work and family life: flexible working hours are easier to obtain for public sector employees than for private sector employees on temporary contracts, for example. In Italy, the effect is different. Couples where the woman has a permanent private-sector contract are those whose earnings are highest (private-sector wages are higher than public-sector wages), and these couples have more often had a child than those

(12) In view of the strong correlation between union duration and woman's age, we have chosen to present here only the model including age. The other findings are not contradicted, whether or not this variable is included.

(13) Moreover, in the "Fertility intentions" survey 1998-2003 (INED) on which their study was based, very strong attrition between the survey waves may have introduced bias (La Rochebrochard et al., 2005).

(14) All other things being equal, contrary to the results of earlier studies (Toulemon and Testa, 2005). As mentioned earlier for marital status, it should be noted that the period of time considered is not the same and that models are not identical, term for term. In this study, sector of activity and type of contract are taken into account.

where the woman works in the public sector. Likewise, couples where the woman is inactive – a more frequent situation in Italy than in France – have more often had a child. Contrary to expectation, the man's employment situation in the first wave has no significant effect, however. The traditional microeconomic interpretations focus on the central role of the male partner's financial situation in the realization of fertility intentions. Our non-significant result may be due to the imprecise definition of the man's employment status used here, and to the small number of couples where the man is not in employment.

Last, the dwelling occupancy status (owner or not) influences realization, but only in France, and in an unexpected direction. While one might expect homeowners (or homebuyers) to realize their intentions more frequently, given that this status tends to be associated with a more settled financial, geographical and conjugal situation, the reverse is actually observed. Intentions are more frequently realized by tenants than by homeowners or homebuyers. One explanation for this may be that parenthood and home ownership are competing goals in financial terms (Courgeau and Lelièvre, 1992). For Italy, the absence of a significant effect is hardly surprising. A previous study has shown that the dwelling occupancy status does not affect fertility intentions, which are more dependent upon the perceived sense of housing security over the coming three years<sup>(15)</sup> (Vignoli et al., 2011). The majority of households are confronted by a variety of constraints: high housing prices, limited rental market, difficulties obtaining a bank loan (Ström, 2010). We cannot give more information here, however, since the French and Italian data do not include the same level of detail: the Italian survey does not distinguish between owners and buyers, while the French survey gives no indication of the respondents' sense of security about their future housing situation.

### III. Unrealized intentions: a temporary or permanent situation?

The study of non-realized intentions remains incomplete without an analysis of the signification of these negative outcomes, especially since the study covered a period of just three years. There is a risk of blurring the distinction between couples who postpone a birth and those who forego it altogether, especially for women at the beginning of their reproductive life (Noack and Østby, 1985; Berrington, 2004). Yet certain characteristics of a couple may be associated with postponement and others with a final decision to not have a/another child.

In order to distinguish between first-wave respondents wishing to postpone and those reporting a final decision to not have a/another child, we can look at the intentions for the three following years expressed in the second wave

(15) The question asked was: "Quanto si sente tranquillo nei prossimi 3 anni rispetto alle sue condizioni abitative? – Molto, abbastanza, poco, per niente". ("How secure do you feel about your housing conditions over the next few years? Very secure, quite secure, insecure, very insecure").



by persons who had not yet realized their positive fertility intentions. There are three possible cases: the respondent reiterates his/her intention to have a child; he/she expresses a negative intention (does not want a child in the next three years); he/she is out of scope during the second survey wave (the question on intentions is not asked, either because the female partner is now over 50 or because the couple reported being no longer able to have children). With respect to the following three-year time horizon, these last two types of respondent can be considered as “foregoers” and the first as “postponers”.

In Italy, 56% of respondents who had not realized their positive fertility intentions were foregoers and in France, 52%. This overall figure conceals major disparities by couple characteristics, notably the stage reached in their reproductive life.

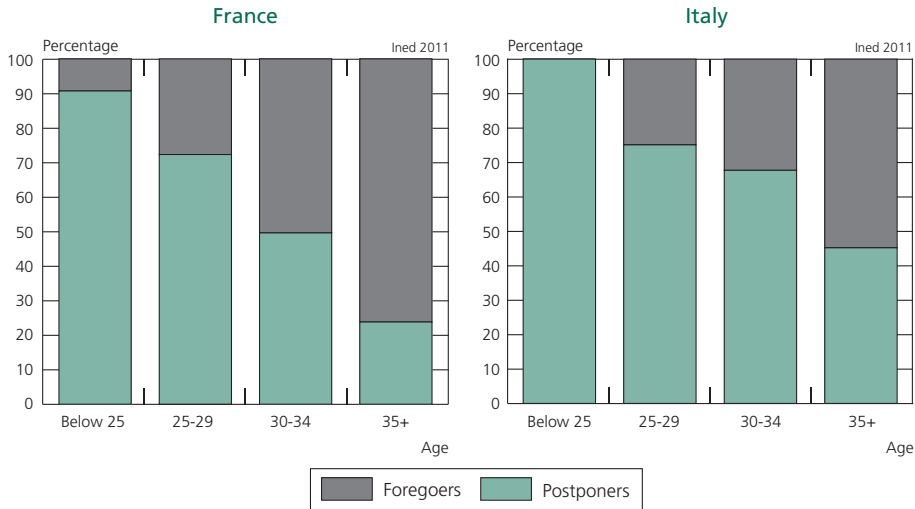
Foregoers are very rare among the youngest couples (those where the women is aged below 25 during the first survey wave): all, or practically all, still intend to have a child within the next three years, both in Italy and in France (Figure 4). This finding is hardly surprising, given that many of the youngest couples still do not have children and very few wish to remain childless. A variety of events may have prevented them from having an intended child, such as a delayed entry into the labour market or a separation. The situation is reversed as age increases, however, and from age 35, the majority of respondents who had not realized their intentions are foregoers: 76% in France and 55% in Italy.<sup>(16)</sup> While the proportion of foregoers at this age is lower in Italy than in France, this is probably due to a structural effect linked to the number of children already born – lower at these ages in Italy. An effect similar to that of age is observed by number of children already born: the higher their number, the greater the proportion of foregoers.

Beyond age and number of children, other factors may influence the decision to forego a birth rather than postpone it. To account for structural effects, a logistic regression was performed to compare foregoers and postponers among couples who had not realized their positive intentions. The model used practically the same variables as in the previous one, but they were updated. The intentions expressed in the second wave do not need to be matched against the situation of persons observed in the first wave.<sup>(17)</sup> We considered the partners' occupational status, the distance from the mother's home and the housing occupancy status at the time of the second survey, and any change in marital status between the two waves was recorded. The scope was limited to persons who did not separate between the two waves

(16) This reflects a construction effect in that some of these couples have become out of scope due to the woman's age.

(17) For example, the respondent's mother may have died between two waves, so the question about geographical proximity becomes meaningless. Likewise for marital situation, housing and occupational status.

**Figure 4. Proportion of couples who postponed or abandoned their plans to have a child by woman's age at the first survey wave, France and Italy**



**Population:** Persons who had expressed the intention to have a child “in the next three years” but who did not have one, in a cohabiting union with the same partner at the time of both survey waves and still of childbearing age at the time of the first wave (France: N = 219; Italy: N = 445).

**Sources:** France: INED-INSEE, ERFI-GGS1-2, 2005-2008; Italy: ISTAT-FSS-GGS1-2, 2003-2007.

so that the characteristics of both partners are known. Certain modalities are missing in Italy (“below age 25”, all wishing to have (more) children, and “marriage between the two waves”).

As for the realization of intentions, the cross-country comparison reveals some similarities, but mainly differences. The firmness of the intention reported in the first wave affects the intentions expressed in the second wave, with persons who initially expressed a weaker intention (“Probably yes”) being more likely to forego a birth. This effect is shared by both countries. Likewise, in both countries, couples where the women is advancing in age are also more likely to be foregoers.

Beyond these characteristics, on the basis of the criteria used in the model, there is little distinction between postponers and foregoers in France (Table 2). Only the most religious couples (who attend religious services at least once a month) less frequently abandoned their plans to have a child, all other things being equal. This effect is not found in Italy. This may be due to a selection effect of the most religious couples in France. In the past, religious observance was customary and reflected a certain social conformism (going to church was the norm), whereas today it is based more on individual choice. Religious practice has thus become more “discriminating” in France (Régnier-Loilier and Prioux, 2009), but less so in Italy where churchgoing is still very frequent across the whole of society.

Table 2. Probability (coef.  $\beta$  and %) of having abandoned plans for a birth versus postponing them, France and Italy

		France				Italy			
		$\beta$ coef.	Prob.	Sig. level	Number	$\beta$ coef.	Prob.	Sig. level	Number
Constant		0.67	66.1	n.s.	–	-0.74	32.3	n.s.	–
Woman's age (Wave 1)	Below 25	-2.09	19.4	***	33	–	–	n.s.	–
	25-29	-1.15	38.2	**	47	-0.45	23.3	n.s.	78
	30-34	0.00	66.1	Ref.	56	0.00	32.3	Ref.	134
	35+	1.35	88.3	***	89	0.90	54.0	***	233
Number of children (wave 2)	0	-0.66	50.2	n.s.	71	-0.98	15.2	***	152
	1	0.00	66.1	Ref.	68	0.00	32.3	Ref.	212
	2 or more	0.12	68.8	n.s.	86	1.32	64.1	***	81
Type of couple (change wave 1-2)	Unmarried – unmarried	-0.45	55.3	n.s.	94	0.31	39.5	n.s.	46
	Married – married	0.00	66.1	Ref.	115	0.00	32.3	Ref.	399
	Married between the 2 waves	-0.56	52.6	n.s.	16	–	–	n.s.	–
Woman's educational level (wave 2)	Low	0.00	66.1	Ref.	71	0.00	32.3	Ref.	142
	Medium	0.43	74.9	n.s.	78	-0.48	22.9	*	230
	High	-0.10	63.8	n.s.	76	-1.31	11.4	***	73
Partner's educational level (wave 2)	Low	0.00	66.1	Ref.	95	0.00	32.3	Ref.	188
	Medium	0.65	79.0	n.s.	69	0.31	39.3	n.s.	197
	High	0.12	68.8	n.s.	61	-1.49	9.7	***	60
Woman's occupa- tional status (wave 2)	Public sector employment	0.00	66.1	Ref.	67	0.00	32.3	Ref.	87
	Private sector employment, perm. contract	-0.57	52.5	n.s.	117	-0.51	22.2	n.s.	175
	Private sector employment, temp. contract	0.16	69.7	n.s.	18	0.21	37.2	n.s.	28
	Unemployed	1.29	87.6	n.s.	13	-0.14	29.3	n.s.	24
	Inactive (homemaker, etc.)	0.93	83.1	n.s.	10	-0.70	19.2	**	131

Table 2 (cont'd). Probability (coef.  $\beta$  and %) of having abandoned plans for a birth versus postponing them, France and Italy

	France				Italy			
	$\beta$ coef.	Prob.	Sig. level	Number	$\beta$ coef.	Prob.	Sig. level	Number
Partner's occupational status (France: wave 2; Italy wave 1)								
In employment	0.00	66.1	Ref.	214	0.00	32.3	Ref.	429
Doesn't work	-0.81	46.5	n.s.	11	-0.05	31.2	n.s.	16
Dwelling occupancy status (wave 2)								
Owner	0.00	66.1	Ref.	150	0.00	32.3	Ref.	308
Tenant	-0.65	50.5	n.s.	65	0.06	33.6	n.s.	70
Other (housed free of charge, etc.)	-0.87	45.1	n.s.	10	0.13	35.2	n.s.	67
Distance from respondent's mother's home (wave 2)								
Near	0.00	66.2	n.s.	75	0.38	41.0	n.s.	176
Moderate	-0.32	58.5	n.s.	73	0.75	50.3	**	132
Far	0.00	66.1	Ref.	55	0.00	32.3	Ref.	93
Mother deceased	0.07	67.7	n.s.	22	1.11	59.2	**	44
Religious practice (wave 1)								
At least once a month	-1.06	40.3	*	16	-0.11	29.9	n.s.	239
Less often	0.00	66.1	Ref.	209	0.00	32.3	Ref.	206
Firmness of intention (wave 1)								
Certainly	0.00	66.1	Ref.	97	0.00	32.3	Ref.	116
Probably	1.45	89.3	***	128	0.72	49.6	**	329
Distribution								
Foregoers		52.1%		114		55.6%		248
Postponers		47.9%		105		44.4%		197
Type of model								
Pseudo R <sup>2</sup> (firmness of intention only)		0.0864				0.0442		
Pseudo R <sup>2</sup> (complete model)		0.5031				0.1963		
<p><b>Interpretation:</b> A positive (resp. negative) and statistically significant coefficient indicates a factor which increases (resp. decreases) the probability of having abandoned plans to have a child, all other things being equal. The stronger the coefficient (positive or negative), the greater the factor's influence on this probability.</p> <p><b>Statistical significance :</b> * 10%; ** 5%; *** 1%; n.s. non-significant.</p> <p><b>Population:</b> Persons who had expressed the intention to have a child "in the next three years" but who did not have one, in a cohabiting union with the same partner at the time of both survey waves and still of childbearing age at the time of the first wave.</p> <p><b>Sources:</b> France: INED-INSEE, ERFI-GGS1-2, 2005-2008; Italy: ISTAT-FSS-GGS1-2, 2003-2007.</p>								

In Italy, on the other hand, the decision to forego or postpone depends on more factors, notably the number of children already born and the partners' educational level. First, among couples who did not realize their positive intentions, those who are childless are half as likely as parents of one child to have abandoned their plans (15% versus 32%, respectively), while the opposite is observed for parents of at least two children, for whom the probability of having given up the plan to have a child expressed in the first wave is doubled (64%). Second, the strong effect of educational level on the probability of realizing intentions is played out in an identical manner here. The higher the partners' educational level, the lower the likelihood of having abandoned their plans. Educational level thus seems to be a key factor of fertility behaviours in Italy, in contrast to France where it has no effect.

Living close to the mother, a potential carer of the future child, also has a significant effect in Italy when the mother is deceased, in which case the couple is more likely to forego its childbearing plans. Conversely, a "moderate" distance from the mother also increases this probability with respect to a "far" distance, though this effect remains difficult to explain. However, given the imprecision of the indicator (proximity to respondent's mother, with no information on that of the mother-in-law), this finding is not robust.

Last, in France as in Italy, and by contrast with the probability of having realized positive fertility intentions between the two waves, neither conjugal status, nor home ownership influence the fact of having abandoned or postponed childbearing plans, all other things being equal.

## Conclusion

In an era of effective birth control (Thomson and Brandreth, 1995) and assisted reproductive technologies (Sobotka et al., 2008) – although the latter do not always provide an answer to fecundity problems – one might expect to find a strong correlation between fertility intentions and realization in Europe. In practice, however, couples may revise their initial fertility intentions or be unable to realize them for a variety of reasons.

It is useful to compare the realization of intentions in France and Italy as the two countries are practical opposites in terms of fertility levels, despite a similar desired number of children (the majority of couples in both France and Italy want at least two children). The GGS surveys are well suited for such a study as they provide data that are comparable (same question wording) and longitudinal, making it possible to see how respondents' reported childbearing intentions "in the next three years" have translated into reality three years later. Several findings emerge.

First, the study confirms the strong predictive power of negative fertility intentions and, conversely, the large gap between the number of children desired by couples and the number they actually have.

Second, the comparison highlights an important difference between the two countries: the proportion of couples who realize their positive fertility intentions is systematically higher in France. France has a long history of policies that encourage fertility, including extensive preschool daycare provision to favour the work-life balance, tax breaks for parents, family benefits and better general coverage of certain risks (such as job loss). In Italy, while female labour force participation has risen sharply in the last few decades, the country's institutions have not adapted sufficiently to recent change (Livi Bacci and Salvini 2000; McDonald, 2000). This difference suggests that positive intentions may not simply reflect couples' desires, but also the dominant social norms (Livi Bacci, 2001), which are perhaps stronger in a country with a deep-seated familialist tradition such as Italy (Dalla Zuanna, 2001). Couples in Italy might answer the question on intentions less realistically than in France, where the wish to remain childless may be less unacceptable. This overestimation of positive fertility intentions in Italy may explain the lesser realization of intentions in the short term.

But likewise, among couples who did not intend to have child, the proportion who went on to have one was also higher in France, suggesting that the future is still more open in France (especially for respondents who replied "probably not" to the question on intentions). An interpretation may be that in France, where family policies are more generous, there is more scope to change one's mind, while in Italy, where the institutional system is much less family-friendly, couples are more realistic about the future and more unwavering in their decision to not have children.

Third, beyond the classic effect of age or number of children on the realization of intentions, socioeconomic factors also play a central role at individual level. However, unlike the determinants of the desired number of children, which are quite similar in France and Italy (Vignoli and Régnier-Loilier, 2009), the factors affecting realization of intentions are quite different (this is the case for level of education, religious practice, etc.). One of the most notable differences concerns the partners' educational level, which is an important factor in Italy but is non-significant in France. Among the characteristics influencing behaviours in France, we note that occupational insecurity is an obstacle to realization of positive intentions.

Last, among couples who did not realize their intentions in the three-year study period, some may simply have postponed their plans, while others may have abandoned them altogether. In this respect, the determinants of non-realization of fertility intentions (Section II) are not all identical to those affecting a permanent decision to forego a birth (Section III). This is notably the case for religious practice and marital status in France, and occupational status in both countries. By contrast, in Italy, educational level affects both realization of intentions and the decision to forego a birth, indicating the importance of this factor on fertility behaviours in that country. Even though

our findings in this area remain exploratory, notably because of the small numbers involved, and deserve to be investigated in more depth, they reveal the importance of not simply focusing on the short-term obstacles to realization of intentions, but of taking things further by distinguishing between couples who postpone and those who abandon their plans altogether.

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## APPENDIX

## Data and scope of the study

*The data: first two waves of the Generations and Gender Survey*

The longitudinal data collected via the Generations and Gender Survey (GGS), an international project initiated by the United Nations Economic Commission for Europe, can be used to compare fertility intentions and actual behaviours in different countries, including France and Italy. The questionnaire used in each wave, designed for a prospective approach, records a range of factual information on the respondents' situation, (employment status, conjugal status, number of children, religion, etc.) and on their fertility intentions.

In France, the first wave of GGS (renamed Études des relations familiales et intergénérationnelles, ERFI, in French), was conducted by the French National Institute for Demographic Studies (Institut national d'études démographiques, INED) and the National Institute for Statistics and Economic Studies (Institut national de la statistique et des études économiques, INSEE) at the end of 2005 on a sample of 10,079 men and women aged 18-79 (Régnier-Loilier, 2009a). One person drawn at random in each household was interviewed and gave information concerning him/herself (facts, but also personal intentions) and his/her partner (level of education, occupational status, etc.). Among these respondents, 6,534 were interviewed again three years later (end of 2008). An adjustment variable was calculated to correct for attrition bias, with highest losses among the youngest and oldest respondents, persons in poor health, persons living alone, students, etc. (Régnier-Loilier, 2009b). A third and final wave is scheduled for the end of 2011.

Italy has not conducted the GGS Survey in full, but has included certain GGS questions, including those on fertility intentions, in an ongoing project, the Indagine Famiglia e Soggetti Sociali (FSS). The FSS survey was conducted by the Italian National Institute of Statistics (ISTAT)<sup>(18)</sup> at the end of 2003 as part of the Multiscopo family survey programme. The members of 24,000 households, totalling 50,000 individuals, were interviewed.<sup>(19)</sup> When couples were interviewed, each member responded separately and independently. A sub-sample of 10,000 persons aged 18-64 were interviewed again just over three years later (early 2007).<sup>(20)</sup> Like for France, an adjustment variable is used to correct for bias linked to sample structure and attrition. No third wave is planned.

(18) With funding from the Ministry of Labour and Social Policies (Ministero del Lavoro e delle Politiche Sociali).

(19) [http://www.istat.it/strumenti/rispondenti/indagini/famiglia\\_societa/famigliesoggettisociali/indagine\\_2003](http://www.istat.it/strumenti/rispondenti/indagini/famiglia_societa/famigliesoggettisociali/indagine_2003)

(20) [http://www.istat.it/strumenti/rispondenti/indagini/famiglia\\_societa/otticadigenere/](http://www.istat.it/strumenti/rispondenti/indagini/famiglia_societa/otticadigenere/)



This study is based primarily on the responses to a single question that was asked in both surveys: “Do you intend to have a/another child during the next three years? Definitely yes; probably yes; probably not; definitely not”.<sup>(21)</sup> While this question was asked directly to all persons of childbearing age in Italy, it was filtered in France, for methodological reasons,<sup>(22)</sup> by an initial question: “Are you currently trying to have a child? Yes; No, not for the moment; No, I don’t want any more children now or later”. Only persons who answered “No, not for the moment” were asked about their fertility intentions. Those who answered “Yes” were considered to definitely want a child in the next three years, while those who answered “No, I don’t want any more children now or later” were considered to definitely not want a child in the next three years.

To ensure comparability of results, only available data that were common to both surveys were used (conjugal status, family situation, dwelling occupancy status, occupational status, etc.). Other less comparable data, concerning the division of domestic tasks for example, were excluded.

### *Scope of the study*

In order to establish an overall framework of the change in fertility levels and timing in each country, the first part concerns women who were aged 35-64 at the time of the first survey wave. We then focus on women aged 20-40 with a partner in order to describe their fertility intentions.

The second part is limited to persons in a cohabiting couple where the woman was aged below 50 in the first wave and who were interviewed again three years later, the aim being to see whether their intentions had been realized or not. Then, among these persons, only those who expressed the intention to have a child in the next three years are considered with a view to identifying the characteristics associated with not having the desired child.

Last, in the third part, only persons who did not realize their positive fertility intentions are considered in order to distinguish between the profiles of couples who abandoned their plan to have a child and those who postponed it.

In the second and third parts, the male and female respondents are grouped together to obtain a sufficient sample size. In the vast majority of cases, the two members of a couple gave the same answer to the question on fertility intentions (Régnier-Loilier and Solaz, 2010), so this grouping is possible, despite the limitations that it entails.

(21) In the French version the equivalent of the word “definitely” (*certainement*) was removed from the response categories after the test survey because it was sometimes confused with “probably” (*probablement*) and weakened the firmness of the intention with respect to a simple “Yes” or “No” answer.

(22) The test surveys showed that there were too many questions on intentions and that they were too insistent for couples where the woman was already reaching the end of her reproductive life (but was under 50) and who already had their desired number of children.



## REFERENCES

- AJZEN I., 1991, "The theory of planned behavior", *Organizational Behavior and Human Decision Processes*, 50, pp. 179-211.
- BERRINGTON A., 2004, "Perpetual postponers? Women's, men's and couples' fertility intentions and subsequent fertility behaviour", *Population Trends*, 117, pp. 9-19.
- BONGAARTS J., 2001, "Fertility and reproductive preferences in post-transitional societies", *Population and Development Review*, Supplement to vol. 27, pp. 260-281.
- BORRA S., RACIOPPI F., ROCCI R., 1999, "Differenze di fecondità e di aspettative e differenze di contesto", in De Sandre P., Pinnelli A., Santini A. (eds.), *Nuzialità e fecondità in trasformazione: percorsi e fattori del cambiamento*, Bologna, il Mulino, pp. 635-649.
- BRETON D., PRIOUX F., 2009, "The one-child family: France in the European context", *Demographic Research*, 20(27), pp. 657-692.
- COURGEAU D., LELIÈVRE E., 1992, "Interrelations between first home-ownership, constitution of the family, and professional occupation in France", in Trussell J., Hankinson R., Tilton J. (eds.), *Demographic Applications of Event History Analysis*, Oxford, Clarendon Press, pp. 120-140.
- DALLA ZUANNA G., 2001, "The banquet of Aeolus: A familistic interpretation of Italy's lowest low fertility", *Demographic Research*, 4, pp. 133-162.
- DALLA ZUANNA G., BILLARI F., 2008, *La rivoluzione nella culla. Il declino che non c'è*, Milano, Università Bocconi editore, 194 p.
- DALLA ZUANNA G., MICHELI G., 2004, *Strong Family and Low Fertility: A Paradox*. Dordrecht, Kluwer Academic Press.
- DE SANDRE P., ONGARO F., RETTAROLI R., SALVINI S., 1997, *Matrimonio e figli: tra rinvio e rinuncia*, Bologna, il Mulino, 218 p.
- GOLDSTEIN J., LUTZ W., TESTA M. R., 2004, "The emergence of sub-replacement family size ideals in Europe", *Population Research and Policy Review*, 22(5-6), pp. 479-496.
- ISTAT, 2010, *Le difficoltà nella transizione dei giovani allo stato adulto e le criticità nei percorsi di vita femminili*, [http://www.istat.it/salastampa/comunicati/non\\_calendario/20091228\\_00/testointegrale20091228.pdf](http://www.istat.it/salastampa/comunicati/non_calendario/20091228_00/testointegrale20091228.pdf)
- KREYENFELD M., 2002, "Time-squeeze, partner effect or self-selection? An investigation into the positive effect of women's education on second birth risks in West Germany", *Demographic Research*, 7, pp. 15-48.
- LA ROCHEBROCHARD É. de., MAZUY M., RAZAFINDRATSIMA N., 2005, "Déperdition dans l'enquête sur les intentions de fécondité", Paris, INED, Document de travail, 127.
- LERIDON H., 2010, "Human fecundity: situation and outlook", *Population and Societies*, 471.
- LIVI BACCI M., 2001, "Comment: Desired family size and the future course of fertility", *Population and Development Review*, Supplement: *Global Fertility Transition*, 27, pp. 282-289.
- LIVI BACCI M., SALVINI S., 2000, "Trop de famille et trop peu d'enfants : la fécondité en Italie depuis 1960", *Cahiers québécois de démographie*, 29(2), pp. 231-254.
- MATYSIAK A., VIGNOLI D., 2010, "Employment around first birth in two adverse institutional settings: Evidence from Italy and Poland", in Schmitt C., Trappe H. (eds.), *Gender Relations in Europe – Change or Continuity, Special Issue of the Journal of Family Research*, 3, pp. 331-346.
- MAZUY M., 2009, "Avoir un enfant : être prêts ensemble", *Revue des sciences sociales*, 41, pp. 30-41.
- MCDONALD P., 2000, "Gender equity in theories of fertility transition", *Population and Development Review*, 26(3), pp. 427-439.

- MEGGIOLARO S., 2009, "The importance of intentions in the mechanism of reproductive behaviour formation", *Statistical Methods and Applications*, 19(1), pp. 107-125.
- MENCARINI L., 2007, "Sistema di genere asimmetrico e bassa fecondità", in Gesano G., Ongaro F., Rosina A. (eds.), *Rapporto sulla popolazione. L'Italia all'inizio del XXI secolo*, Bologna, il Mulino, pp. 83-85.
- MILLS M., MENCARINI L., TANTURRI M. L., BEGALL K., 2008, "Gender equity and fertility intentions in Italy and the Netherlands", *Demographic Research*, 18, pp. 1-26.
- MONNIER A., 1987, "Projets de fécondité et fécondité effective. Une enquête longitudinale : 1974, 1976, 1979", *Population*, 42(6), pp. 819-842.
- NEYER G., LAPPEGÅRD T., VIGNOLI D., RIECK D., 2011, "Gender equality and fertility: Which equality matters?", Stockholm University, Stockholm Research Reports in Demography 2011, 9 [http://www.suda.su.se/SRRD/SRRD\\_2011\\_9.pdf](http://www.suda.su.se/SRRD/SRRD_2011_9.pdf)
- NOACK T., ØSTBY L., 1985, "Fertility expectations: A short-cut or dead-end in predicting fertility?", *Scandinavian Population Studies*, 7, pp. 48-59.
- NOACK T., ØSTBY L., 2002, "Free to choose – but unable to stick it? Norwegian fertility expectations and subsequent behaviour in the following 20 years", in Klijzing E., Corijn M. (eds.), *Dynamics of Fertility and Partnership in Europe – Insights and Lessons from Comparative Research*, Volume II, New York and Geneva, United Nations.
- OECD, 2009, *Indicators of Employment Protection in OECD and Selected non-OECD Countries in 2008*, Paris, [www.oecd.org/employment/protection](http://www.oecd.org/employment/protection)
- ONGARO F., 1982, "Preferenze per il numero e il sesso dei figli, in Indagine sulla fecondità in Italia", in De Sandre P. (ed.), *Rapporto generale, vol. 1, Metodologia e analisi*, Padova, Università di Padova- Firenze-Roma.
- PALOMBA R., 1991, "Le strategie riproduttive degli Italiani", in Palomba R. (ed.), *Crescita zero. Le opinioni degli Italiani in un'indagine dell'Istituto di Ricerche sulla Popolazione, La Nuova Italia*, Firenze, pp. 121-161.
- PISON G., 2011, "The population of the world (2011)", *Population and Societies*, 480.
- PLA A., BEAUMEL C., 2010, "Deux pacs pour trois mariages. Bilan démographique 2009", *Insee première*, 1276.
- QUESNEL-VALLÉE A., MORGAN S. P., 2003, "Missing the target? Correspondence of fertility intentions and behavior in the U.S.", *Population Research and Policy Review*, 22(5-6), pp. 497-525.
- RÉGNIER-LOILIER A., 2006, "Influence of own sibship size on the number of children desired at various times of life. The case of France", *Population, English Edition*, 61(3) pp. 165-194.
- RÉGNIER-LOILIER A., 2007, *Avoir des enfants en France. Désirs et réalités*, Ined, Cahier 159, 267 p.
- RÉGNIER-LOILIER A., 2009a, "L'étude des relations familiales et intergénérationnelles. Du projet international à l'enquête française", in Régnier-Loilier A. (ed.), *Portraits de familles. L'enquête Étude des relations familiales et intergénérationnelles*, INED, Grandes enquêtes, pp. 31-56.
- RÉGNIER-LOILIER A., 2009b, "La déperdition dans les enquêtes longitudinales : l'exemple de l'enquête Erfi", *Courrier des statistiques*, 128, pp. 55-61, [http://www.insee.fr/fr/themes/document.asp?reg\\_id=0&id=2898](http://www.insee.fr/fr/themes/document.asp?reg_id=0&id=2898)
- RÉGNIER-LOILIER A., PRIOUX F., 2009, "Comportement familiaux et pratique religieuse en France", in Régnier-Loilier A. (ed.), *Portraits de familles. L'enquête Étude des relations familiales et intergénérationnelles*, INED, Grandes enquêtes, pp. 397-423.
- RÉGNIER-LOILIER A., SOLAZ A., 2010, "La décision d'avoir un enfant : une liberté sous contraintes", *Politiques sociales et familiales*, 100, pp. 61-78.

- RÉGNIER-LOILIER A., VIGNOLI D., 2009, "Enfant unique ou famille nombreuse : qui s'écarter de la norme à deux enfants ? Comparaison des souhaits de fécondité en France et en Italie", *Revue des sciences sociales*, 41, pp. 16-29.
- RINESI F., 2009, *Fecondità attesa e realizzata delle madri italiane*, PhD thesis, La Sapienza, University of Rome, 93 p.
- ROBERT-BOBÉE I., MAZUY M., 2005, "Calendriers de constitution des familles et âge de fin d'études", in Lefèvre C. and Filhon A. (eds.), *Histoires de familles, histoires familiales : les résultats de l'enquête Famille de 1999*, Paris, INED, Cahier 156, pp. 175-200.
- ROSINA A., 2007, "Formazione della famiglia e relazioni di coppia", in Gesano G., Ongaro F., Rosina A. (eds.), *Rapporto sulla popolazione. L'Italia all'inizio del XXI secolo*, Bologna, il Mulino, pp. 37-60.
- ROSINA A., TESTA M. R., 2009, "Couples' first child intentions and disagreement: An analysis of the Italian case", *European Journal of Population*, 25(4), pp. 487-502.
- SALVINI S., FERRO I., 2007, *Young Workers and Flexibility of the Labour Market: What Family Strategies?*, DSUNIFI, Dipartimento di Statistica G. Parenti, Working Paper 2007/13, [http://eprints.unifi.it/archive/00001561/01/wp2007\\_13.pdf](http://eprints.unifi.it/archive/00001561/01/wp2007_13.pdf)
- SCHOEN R., ASTONE N. M., KIM Y. J., NATHANSON C. A., FIELDS J. M., 1999, "Do fertility intentions affect fertility behavior?", *Journal of Marriage and the Family*, 61(3), pp. 790-799.
- SOBOTKA T., HANSEN M. A., JENSEN T. K., TØNNES PEDERSEN A., LUTZ W., SKAKKEBÆK N. E., 2008, "The contribution of assisted reproduction to completed fertility: An analysis of Danish data", *Population and Development Review*, 34(1), pp. 79-101.
- SORVILLO M. P., MARSILI M., 1999, "Aspettative di fecondità", in De Sandre P., Pinnelli A., Santini A. (eds.), *Nuzialità e fecondità in trasformazione: percorsi e fattori del cambiamento*, Bologna, il Mulino, pp. 667-682.
- STRÖM S., 2010, "Housing and first births in Sweden, 1972-2005", *Housing Studies*, 25(4), pp. 509-526.
- SYMEONIDOU H., 2000, "Expected and actual family size in Greece: 1983-1997", *European Journal of Population*, 16(4), pp. 335-352.
- TESTA M. R., GRILLI L., 2006, "The influence of childbearing regional contexts on ideal family size in Europe", *Population, English Edition*, 61(1-2), pp. 109-138.
- TESTA M. R., TOULEMON L., 2006, "Family formation in France: Individual preferences and subsequent outcomes", *Vienna Yearbook of Population Research 2006*, Vienna, pp. 41-76.
- THÉVENON O., GAUTHIER A. H., 2010, "Variations de la fécondité dans les pays développés : disparités et influences des politiques d'aides aux familles", *Politiques sociales et familiales*, 100, pp. 7-21.
- THOMSON E., 1997, "Couple childbearing desires, intentions, and births", *Demography*, 34(3), pp. 343-354.
- THOMSON E., BRANDRETH Y., 1995, "Measuring fertility demand", *Demography*, 32(1), pp. 81-96.
- TOULEMON L., TESTA M. R., 2005, "Fertility intentions and actual fertility: a complex relationship", *Population and Societies*, 415.
- VIGNOLI D., 2011, *Human capital and the entry into motherhood in Italy*, Università de Firenze, Dipartimento di Statistica G. Parenti, WP 2011/06, [http://www.ds.unifi.it/ricerca/publicazioni/working\\_papers/2011/wp2011\\_06.pdf](http://www.ds.unifi.it/ricerca/publicazioni/working_papers/2011/wp2011_06.pdf)
- VIGNOLI D., FERRO I., 2009, "Rising marital disruption in Italy and its correlates", *Demographic Research*, 20, pp. 11-36.
- VIGNOLI D., RÉGNIER-LOILIER A., 2009, "Chi non desidera due figli? Uno studio comparativo tra Francia e Italia", *Rivista di Studi Familiari*, 1, pp. 19-39.
- VIGNOLI D., RINESI F., MUSSINO E., 2010, *A home to plan the first child? Fertility intentions and housing conditions in Italy*, Università de Firenze, Dipartimento di Statistica G. Parenti, WP 2011/04, [http://www.ds.unifi.it/ricerca/publicazioni/working\\_papers/2011/wp2011\\_04.pdf](http://www.ds.unifi.it/ricerca/publicazioni/working_papers/2011/wp2011_04.pdf)

VIKAT A., SPEDER Z. et al., 2007, "Generations and Gender Survey (GGS): Towards a better understanding of relationships and processes in the life course", *Demographic Research*, 17(14), pp. 389-440.

WESTOFF C. F., RYDER N. B., 1977, "The predictive validity of reproductive intentions", *Demography*, 14(4), pp. 431-453.

### Arnaud RÉGNIER-LOILIER, Daniele VIGNOLI • FERTILITY INTENTIONS AND OBSTACLES TO THEIR REALIZATION IN FRANCE AND ITALY

This article compares fertility intentions and realization in France (2005-2008) and in Italy (2003-2007), two countries with contrasting fertility models, using comparable data from the longitudinal Generations and Gender Surveys (GGS). Four main findings are presented. First, the strong predictive power of negative fertility intentions and, conversely, the fact that positive intentions overestimate actual outcomes, are highlighted. The comparison then reveals an important difference: the proportion of couples who realized their positive fertility intentions was systematically higher in France and, for those who did not intend to have a child, the proportion who went on to have one was also higher. Alongside the classic effects of age and number of children, socioeconomic factors play an important role, and less favourable situations appear to hinder the realization of intentions. The determinants of intentions are not all identical, however, and there is no single model that applies to both countries: the role of context remains primordial. Last, among couples who did not realize their intentions, some had postponed their childbearing plans while others had abandoned them altogether. Here too, the determinants are not the same in both countries. In this respect, the distinction between those who postpone and those who forego, rarely made in the literature, is an interesting question.

### Arnaud RÉGNIER-LOILIER, Daniele VIGNOLI • INTENTIONS DE FÉCONDITÉ ET OBSTACLES À LEUR RÉALISATION EN FRANCE ET EN ITALIE

Cet article confronte intentions de fécondité et réalisation en France (2005-2008) et en Italie (2003-2007), pays où les modèles de fécondité sont contrastés, en s'appuyant sur des données comparables issues du programme d'enquête longitudinale *Generations and Gender Survey* (GGS). Quatre principaux résultats ressortent. Le fort pouvoir prédictif des intentions négatives de fécondité et, à l'inverse, le fait que les intentions positives surestiment les comportements sont d'abord mis en évidence. La comparaison met ensuite en lumière une différence importante : la proportion de couples réalisant leurs intentions positives de fécondité est systématiquement plus élevée en France et, lorsqu'ils n'avaient pas l'intention d'avoir un enfant, la proportion de ceux en ayant eu un est également supérieure. Outre l'effet classique de l'âge et du nombre d'enfants, les facteurs socioéconomiques jouent un rôle important, les situations moins favorables apparaissant comme un obstacle à la réalisation des intentions. Les déterminants des intentions ne sont cependant pas tous identiques et il n'existe pas un unique modèle transposable d'un pays à l'autre : le rôle du contexte reste central. Enfin, lorsque les couples n'ont pas réalisé leurs intentions, certains ont reporté leur projet tandis que d'autres y ont renoncé. Les déterminants sont cependant différents selon le pays considéré. La distinction entre renoncement et ajournement, rarement faite dans les études, s'avère de ce point de vue intéressante.

### Arnaud RÉGNIER-LOILIER, Daniele VIGNOLI • INTENCIONES DE FECUNDIDAD Y OBSTÁCULOS A SU REALIZACIÓN EN FRANCIA Y EN ITALIA

Este artículo confronta las intenciones de fecundidad y su realización en France (2005-2008) y en Italia (2003-2007), países con modelos de fecundidad contrastados, sobre la base de datos comparables provenientes de la Encuesta longitudinal *Generations and Gender Survey* (GGS). Cuatro resultados principales se destacan. En primer lugar, se pone en evidencia el fuerte poder predictivo de las intenciones negativas e inversamente el hecho de que las intenciones positivas sobrestiman los comportamientos. La comparación entre los dos países pone también de manifiesto una diferencia importante: la proporción de parejas que realizan sus intenciones positivas de fecundidad es sistemáticamente más elevada en Francia y, cuando no tenían la intención de tener un hijo, la proporción de las que lo han tenido es también más elevada. Además del efecto clásico de la edad y del número de hijos, los factores socioeconómicos juegan un papel importante y las situaciones menos favorables aparecen como un obstáculo a la realización de las intenciones. Sin embargo, los determinantes de las intenciones no son todos idénticos y no existe un modelo único transportable de un país al otro: el rol del contexto es central. En fin, cuando las parejas no han realizado sus intenciones, ciertas de ellas han diferido su proyecto mientras que otras han renunciado a él. Pero los determinantes son diferentes de un país al otro. La distinción entre renunciamiento y aplazamiento, que los estudios hacen raramente, se revela interesante desde este punto de vista.

**Keywords:** Fertility intentions, realization of intentions, longitudinal data, Generations and Gender Survey (GGS), Étude des relations familiales et intergénérationnelles (ERFI), Indagine Famiglia e Soggetti Sociali (FSS), France, Italy.

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